

1P3 Rec'd PCT/PTO 29 MAR 2005

<b>U. S. PATENT AND TRADEMARK OFFICE U.S. DEPARTMENT OF COMMERCE</b>		ATTORNEY'S DOCKET NUMBER 21421F <b>10/ 573764</b>
		U.S. APPLICATION NO. (If known, see 37 CFR 1.5) To Be Assigned
INTERNATIONAL APPLICATION NO. PCT/US2004/031820	INTERNATIONAL FILING DATE 28 September 2004	PRIORITY DATE CLAIMED 2 October 2003
TITLE OF INVENTION NUCLEIC ACID MOLECULES ENCODING NOVEL HUMAN LOW-VOLTAGE ACTIVATED CALCIUM CHANNEL PROTEINS, DESIGNATED -ALPHA 1I-1 AND ALPHA 1I-2. ENCODED PROTEINS AND METHODS OF USE THEREOF		
APPLICANT(S) FOR DO/EO/US MENGHANG XIA AND MARK E. WILLIAMS		
<b>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</b>		
<ol style="list-style-type: none"><li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li><li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li><li>3. <input type="checkbox"/> This is an express request to begin national examination procedures [35 U.S.C. 371(f)]. The submission must include items (5), (6), (9) and (21) indicated below.</li><li>4. <input type="checkbox"/> The US has been elected (PCT Article 31).</li><li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed [35 U.S.C. 371(c)(2)]<ol style="list-style-type: none"><li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li><li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li><li>c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li></ol></li><li>6. <input type="checkbox"/> An English language translation of the International Application as filed [35 U.S.C. 371(c)(2)].<ol style="list-style-type: none"><li>a. <input type="checkbox"/> is attached hereto</li><li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li></ol></li><li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 [35 U.S.C. 371(c)(3)].<ol style="list-style-type: none"><li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li><li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li><li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li><li>d. <input type="checkbox"/> have not been made and will not be made.</li></ol></li><li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 [35 U.S.C. 371(c)(3)].</li><li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) [35 U.S.C. 371(c)(4)].</li><li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 [35 U.S.C. 371(c)(5)].</li></ol>		
<b>Items 11 to 20 below concern other document(s) or information included:</b>		
<ol style="list-style-type: none"><li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li><li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li><li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li><li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li><li>15. <input type="checkbox"/> A substitute specification.</li><li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li><li>17. <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.</li><li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li><li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li><li>20. <input type="checkbox"/> Other items or information:</li></ol>		

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U.S. APPLICATION NO. (If known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
To Be Assigned		PCT/US2004/031820		21421P	
The following fees are submitted:				CALCULATIONS	PTO USE ONLY
21. <input checked="" type="checkbox"/> Basic national fee.....				\$300.00	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))					
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....				\$0	
All other situations.....				\$200	
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))					
If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....				\$0	
Search fee [37 CFR 1.445(a)(2)] has been paid on the international application to the USPTO as an International Searching Authority.....				\$100	
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB .....				\$400	
All other situations.....				\$500	
TOTAL OF 21, 22 and 23=				\$300.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	0 /50	0 = 0	X \$250.00	\$0.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date [37 CFR 1.492(e)].					
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	25 - 20 =	5	X \$50.00	\$250.00	
Independent Claims	12 - 3 =	9	X \$200.00	\$1,800.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00		
TOTAL OF ABOVE CALCULATIONS (SUBTOTAL)				=	\$2,350.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				+	
TOTAL NATIONAL FEE				=	\$2,350.00
Fee for recording the enclosed assignment [37 CFR 1.21(h)]. The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property.				+	
TOTAL FEES ENCLOSED				=	\$2,350.00
				Amount to be refunded:	
				Amount to be charged:	
a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.					
b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. 13-2755 in the amount of \$2,350.00 to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to the Deposit Account No. 13-2755. A duplicate copy of this sheet is enclosed.					
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive [37 CFR 1.137(a) or (b)] must be filed and granted to restore the International Application to pending status.					
SEND ALL CORRESPONDENCE TO:					
Customer No. 000210					
MERCK & CO., INC. Patent Department, RY60-30 P.O. Box 2000 126 East Lincoln Avenue Rahway, New Jersey 07065-0970					
DATE: March 29, 2006					
PHONE #: (732) 594-3889					
SIGNATURE					
Vineet Kohli					
NAME					
37,003					
REGISTRATION NUMBER					

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Page 1A of TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING  
A FILING UNDER 35 U.S.C. 371

Attorney Docket No.: 21421P  
International Appln No.: PCT/US2004/031820  
International Filing Date: 28 September 2004  
Priority Date: 2 October 2003  
Title: NUCLEIC ACID MOLECULES ENCODING NOVEL  
HUMAN LOW-VOLTAGE ACTIVATED CALCIUM  
CHANNEL PROTEINS, DESIGNATED -ALPHA 1I-1  
AND ALPHA 1I-2, ENCODED PROTEINS AND  
METHODS OF USE THEREOF  
Inventors: MENGHANG XIA AND MARK E. WILLIAMS

EXPRESS MAIL CERTIFICATE	
DATE OF DEPOSIT	3/29/06
EXPRESS MAIL NO.	EL 989587258 US
I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS EXPRESS MAIL "POST OFFICE TO ADDRESSEE" ON THE ABOVE DATE IN AN ENVELOPE ADDRESSED TO COMMISSIONER FOR PATENTS P.O. BOX 1450, ALEXANDRIA, VIRGINIA 22313-1450.	
MAILED BY	Kinda Zehrer
DATE	3/29/06